

REPUBLIC OF TRINIDAD AND TOBAGO

THE CIVIL AVIATION ACT, 2001

REGULATIONS

MADE BY THE AUTHORITY WITH THE APPROVAL OF THE MINISTER  
UNDER SECTION 33 OF THE CIVIL AVIATION ACT

THE CIVIL AVIATION [(NO. 15) AIR NAVIGATION SERVICES]  
REGULATIONS, 2006

PART I

1. These Regulations may be cited as the Civil Aviation [(No. 15) Air Navigation Services] Regulations, 2006.

Citation

2. (1) In these Regulations—

Interpretation

“Act” means the Civil Aviation Act, 2001;

No. 11 of 2001

“accepting unit” means an air traffic control unit next to take control of an aircraft;

“accident” means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which—

(a) a person is fatally or seriously injured as a result of—

(i) being in the aircraft; or

(ii) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or

(iii) direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

(b) the aircraft sustains damage or structural failure which—

(i) adversely affects the structural strength, performance or flight characteristics of the aircraft; and

(ii) would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin; or

(c) the aircraft is missing or is completely inaccessible;

“accuracy” means a degree of conformance between the estimated or measured value and the true value;

“ADS” means a surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position-fixing systems, including aircraft identification, four-dimensional position and additional data, as appropriate;

“ADS-C” is a means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports;

*Note: The abbreviated term “ADS contract” is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.*

“ADS-C agreement” means a reporting plan which establishes the conditions of ADS-C data reporting such that data required by the air traffic services unit and frequency of ADS-C reports which have to be agreed to prior to using ADS-C in the provision of air traffic services;

*Note: The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.*

“ADS-B” is a means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link;

“advisory airspace” means an airspace of defined dimensions, or designated route, within which air traffic advisory service is available;

“advisory route” means a designated route along which air traffic advisory service is available;

“aerodrome” means a defined area on land or water including any buildings, installations and equipment intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft;

“aerodrome control service” means the provision of air traffic control service for those parts of controlled flights associated with arrival or departure;

“aerodrome elevation” means the elevation of the highest point of the landing area;

“aerodrome control tower” means a unit established to provide air traffic control service to aerodrome traffic;

“aerodrome operating minima” means the limits of usability of an aerodrome for—

(a) take-off, expressed in terms of runway visual range or visibility and, if necessary, cloud conditions;

(b) landing in precision approach and landing operations, expressed in terms of visibility or runway visual range and decision altitude or height as appropriate to the category of the operation; and

(c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility or runway visual range and decision altitude or height; and

(d) landing in non-precision approach and landing operations, expressed in terms of visibility or runway visual range, minimum descent altitude or height and, if necessary, cloud conditions;

“aerodrome reference point” means the designated geographical location of an aerodrome;

“aerodrome traffic” means all traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome;

“aeronautical chart” means a representation of a portion of the Earth, its culture and relief, specifically designated to meet the requirements of air navigation;

- “aeronautical data” means a representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing;
- “aeronautical fixed service” means a telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services;
- “aeronautical information” means information resulting from the assembly, analysis and formatting of aeronautical data;
- “Aeronautical Information Circular” means a notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters;
- “Aeronautical Information Publication” means a publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation;
- “aeronautical information publication amendment” means permanent changes to the information contained in the AIP;
- “aeronautical information regulation and control” means a system aimed at advance notification based on common effective dates, of circumstances that necessitate significant changes in operating practices;
- “Aeronautical Information Service” means a service established within the defined area of coverage responsible for the provision of aeronautical information or data necessary for the safety, regularity and efficiency of air navigation;
- “aeronautical information service product” means aeronautical information provided in the form of the elements of the Integrated Aeronautical Information Package except NOTAM and pre-flight information bulletin PIB, including aeronautical charts, or in the form of suitable electronic media;
- “aeronautical mobile service” means a mobile communication service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies;

- “aeronautical telecommunication station” means a station in the aeronautical telecommunication service;
- “aircraft stand” means a designated area on an apron intended to be used for parking an aircraft;
- “AIP Supplement” means temporary changes to the information contained in the AIP which are published by means of special pages;
- “air defence identification zone” means special designated airspace of defined dimensions within which aircraft are required to comply with special identification or reporting procedures additional to those related to the provision of ATS;
- “airborne collision avoidance system” means an aircraft system based on SSR transponder signals which operates independently of ground based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders;
- “aircraft” means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s surface;
- “air-ground communication” means two-way communication between aircraft and stations or locations on the surface of the earth;
- “AIRMET information” means information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof;
- “air-taxiing” means movement of a helicopter VTOL above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than thirty-seven kilometers per hour or twenty knots;
- “air taxiway” means a defined path on the surface established for the air taxiing of helicopters;
- “air traffic” means all aircraft in flight or operating on the manoeuvring area of an aerodrome;
- “air traffic advisory service” means a service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans;

“air traffic control clearance” means authorization for an aircraft to proceed under conditions specified by an air traffic control unit;

“air traffic control service” means a service provided for the purpose of—

(a) preventing collisions;

(b) between aircraft;

(i) on the manoeuvring area between aircraft and obstructions;  
and

(ii) expediting and maintaining an orderly flow of air traffic;

“air traffic control unit” means a generic term meaning variously, area control centre, approach control unit or aerodrome control tower;

“air traffic flow management” means a service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority;

“air traffic service” means a generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service which may include area control service, approach control service or aerodrome control service;

“air traffic services airspaces” means airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which ATS and rules of operation are specified;

“air traffic services reporting office” means a unit established for the purpose of receiving reports concerning ATS and flight plans submitted before departure;

“air traffic service route” means a specified route designed for channelling the flow of traffic as necessary for the provision of ATS;

“air traffic services unit” means a generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office;

“air transit route” means a defined path on the surface established for the air transitting of helicopters;

“airway” means a control area or portion thereof established in the form of a corridor;

“ALERFA” means the code word used to designate an alert phase;

“alerting service” means a service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required;

“alert phase” means a situation wherein apprehension exists as to the safety of an aircraft and its occupants;

“alternate aerodrome” means an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing which includes the following:

- (a) “take-off alternate” means an alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure;
- (b) “en route alternate” means an aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route;
- (c) “ETOPS en route alternate” means a suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shut down or other abnormal or emergency condition while en route in an ETOPS operation; and
- (d) “destination alternate” means an alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing;

“altitude” means the vertical distance of a level, a point or an object considered as a point, measured from mean sea level;

“AMA means the minimum altitude to be used under instrument meteorological conditions IMC, that provides a minimum obstacle clearance within a specified area, normally formed by parallels and meridians.

“application” means manipulation and processing of data in support of user requirements;

- “approach control service” means air traffic control service for arriving or departing controlled flights;
- “approach control unit” means a unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes;
- “appropriate air traffic services authority” means the relevant authority designated by the State responsible for providing ATS in the airspace concerned;
- “apron” means a defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance;
- “apron management service” means a service provided to regulate the activities and the movement of aircraft and vehicles on an apron;
- “area control centre” means a unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction;
- “area control service” means air traffic control service for controlled flights in control areas;
- “area minimum altitude” means the lowest altitude to be used under IMC that will provide a minimum vertical clearance of three thousand metres or one thousand feet or in designated mountainous terrain six hundred metres or two thousand feet above all obstacles located in the area specified, rounded up to the nearest next higher thirty metres or one hundred feet;
- “area navigation” means a method of navigation which permits aircraft operation on any desired flight path within the coverage of ground – or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these;
- “area navigation route” means an ATS established for the use of aircraft capable of employing area navigation;
- “arrival routes” means routes identified in an instrument approach procedure by which aircraft may proceed from the en route phase of flight to an initial approach fix;
- “ASHTAM” means a special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption or volcanic ash cloud that is of significance to aircraft operations;

“assemble” means a process of merging data from multiple sources into a database and establishing a baseline for subsequent processing;

“ATS surveillance service” means the service provided directly by means of an ATS surveillance system;

“ATS surveillance system” means a generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft;

*Note: A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than mono-pulse SSR.*

“Authority” means the Trinidad and Tobago Civil Aviation Authority established under the Act;

“automatic terminal information service” means the automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof;

“data link-automatic terminal information service” means the provision of ATIS via data link;

“bare earth” means a surface of the earth including bodies of water and permanent ice and snow, and excluding vegetation and man-made objects;

“base turn” means a turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track where the tracks are not reciprocal;

“calendar” means a discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108\*);

“canopy” means bare earth supplemented by vegetation height;

“change-over point” means the point at which an aircraft navigating on an ATS route segment defined by reference to VOR is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft;

“Chicago Convention” means the Chicago Convention on International Civil Aviation concluded at Chicago on 7th December, 1944 and includes any Protocol amending the Convention and any Annex to the Convention relating to international standards and recommended practices, being an Annex adopted in aerodrome with that Convention;

“clearance limit” means the point to which an aircraft is granted an air traffic control clearance;

“clearway” means a defined rectangular area on the ground or water under the control of the appropriate authority selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height;

“conference communications” means communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously;

“contour line” means a line on a map or chart connecting points of equal elevation;

“control area” means a controlled airspace extending upwards from a specified limit above the earth;

“controlled aerodrome” means an aerodrome at which air traffic control service is provided to aerodrome traffic;

“controlled airspace” means an airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification;

“controlled flight” means any flight which is subject to an air traffic control clearance;

“controller pilot data link communications” means a means of communication between controller and pilot, using data link for ATC communications;

“control zone” means a controlled airspace extending upwards from the surface of the earth to a specified upper limit;

“cruising level” means a level maintained during a significant portion of a flight;

“culture” means all man-made features constructed on the surface of the Earth, such as cities, railways and canals;

“cyclic redundancy check” means a mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data;

“danger area” means an airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times;

“database” means one or more files of data so structured that appropriate applications may draw from the files and update them;

“data link communications” means a form of communication intended for the exchange of messages via a data link;

“data link-VOLMET” means the provision of current aerodrome routine meteorological reports METAR and aerodrome special meteorological reports SPECI, aerodrome forecasts TAF, SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET via data link;

“data product” means data set or data set series that conforms to a data product specification;

“data product specification” means a detailed description of a data set or data set series together with additional information that will enable it to be created, supplied to and used by another party;

*Note: A data product specification provides a description of the universe of discourse and a specification for mapping the universe of discourse to a data set. It may be used for production, sales, end-use or other purpose.*

“data quality” means a degree or level of confidence that the data provided meets the requirements of the data user in terms of accuracy, resolution and integrity;

“data set” means an identifiable collection of data;

“data set series” means a collection of data sets sharing the same product specification;

“datum” means any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities;

“declared capacity” means a measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities and it is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace;

“DETRESFA” means the code word used to designate a distress phase;

“DEM” means the representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum;

*Note: DTM is sometimes referred to as DEM.*

“Digital Elevation Model” means the representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum;

“direct transit arrangements” means special arrangements approved by the public authorities concerned by which traffic which is pausing briefly in its passage through the Contracting State may remain under their direct control;

“displaced threshold” means a threshold not located at the extremity of a runway;

“distress phase” means a situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance;

“downstream clearance” means a clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft;

“electronic aeronautical chart display” means an electronic device by which flight crews are enabled to execute, in a convenient and timely manner, route planning, route monitoring and navigation by displaying required information;

“elevation” means the vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level;

“ellipsoid height or Geodetic height” means the height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question;

“emergency phase” means a generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase;

“feature” means abstraction of real world phenomena;

“feature attribute” means characteristic of a feature;

*Note: A feature attribute has a name, a data type and a value domain association with it.*

“feature operation” means operation that every instance of a feature type may perform;

“feature relationship” means relationship that links instances of one feature type with instances of the same or a different feature type;

“feature type” means class of real world phenomena with common properties;

“final approach” means that part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified—

(a) at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or

(b) at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which—

(i) a landing can be made; or

(ii) a missed approach procedure is initiated;

“final approach and take-off area” means a defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by performance Class 1 helicopters, the defined area includes the rejected take-off area available;

“final approach fix or point” means that fix or point of an instrument approach procedure where the final approach segment commences;

“final approach segment” means that segment of an instrument approach procedure in which alignment and descent for landing are accomplished;

- “flight crew member” means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;
- “flight information centre” means a unit established to provide flight information service and alerting service;
- “flight information region” means an airspace of defined dimensions within which flight information service and alerting service are provided;
- “flight information service” means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights;
- “flight level” means a surface of constant atmospheric pressure which is related to a specific pressure datum, 10 13.2 hectopascals, and is separated from other such surfaces by specific pressure intervals;
- “flight plan” means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;
- “fly-by waypoint” means a waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure;
- “flyover waypoint” means a waypoint at which a turn is initiated in order to join the next segment of a route or procedure;
- “forecast” means a statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace;
- “geodetic datum” means a minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system or frame;
- “geodesic distance” means the shortest distance between any two points on a mathematically defined ellipsoidal surface;
- “geographical position” means a set of latitude and longitude coordinates referenced to the mathematical reference ellipsoid which define the position of a point on the surface of the Earth;
- “geoid” means the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents;

“geoid undulation” means the distance of the geoid above or below the mathematical reference ellipsoid;

“glide path” means a descent profile determined for vertical guidance during a final approach;

“gregorian calendar” means calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar;

“height” means the vertical distance of a level, a point or an object considered as a point, measured from a specified datum;

“helicopter stand” means an aircraft stand which provides for parking a helicopter and, where air taxiing operations are contemplated, the helicopter touchdown and lift-off;

“heliport” means an aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters;

“holding procedure” means a predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance;

“hot spot” means a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots or drivers is necessary;

“human factors principles” mean principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance;

“human performance” means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;

“hypsochromic tints” means a succession of shades or colour gradations used to depict ranges of elevation;

“Instrument Flight Rules flight” means a flight conducted in accordance with the instrument flight rules;

“INCERFA” means the code word used to designate an uncertainty phase;

“incident” means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;

“instrument approach procedure” means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en route obstacle clearance criteria apply;

“initial approach segment” means that segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fix or point;

“instrument meteorological conditions” means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions;

“integrated aeronautical information package” means a package which consists of the following elements :

(a) AIP, including amendment service;

(b) supplements to the AIP;

(c) NOTAM and PIB;

(d) AIC; and

(e) checklists and lists of valid NOTAM;

“integrity of aeronautical data” means a degree of assurance that an aeronautical data and its value has not been lost nor altered since the data origination or authorized amendment;

“intermediate approach segment” means that segment of an instrument approach procedure between either the intermediate approach fix and the final approach fix or point, or between the end of a reversal, racetrack or dead reckoning track procedure and the final approach fix or point, as appropriate;

“intermediate holding position” means a designated position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower;

“international airport” means any airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out;

“international NOTAM office” means an office designated by a State for the exchange of NOTAM internationally;

“isogonal” means a line on a map or chart on which all points have the same magnetic variation for a specified epoch;

“isogriv” means a line on a map or chart which joins points of equal angular difference between the North of the navigation grid and Magnetic North;

“landing area” means that part of a movement area intended for the landing or take-off of aircraft;

“landing direction indicator” means a device to indicate visually the direction currently designated for landing and for take-off;

“level” means a generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level;

“logon address” means a specified code used for data link logon to an ATS unit;

“magnetic variation” means the angular difference between True North and Magnetic North;

“manoeuvring area” means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons;

“marking” means a symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information;

“MEA” means the altitude for an *en route* segment that provides adequate reception of relevant navigation facilities and ATS communications, complies with the airspace structure and provides the required obstacle clearance;

“metadata” means data about data;

“meteorological office” means an office designated to provide meteorological service for international air navigation;

“minimum sector altitude” means the lowest altitude which may be used which will provide a minimum clearance of three hundred metres or one thousand feet above all objects located in an area contained within a sector of a circle of forty-five kilometers or twenty-five nautical miles radius centred on a radio aid to navigation;

“missed approach point” means that point in an instrument approach procedure at or before which the prescribed missed approach procedure must be initiated in order to ensure that the minimum obstacle clearance is not infringed;

“missed approach procedure” means the procedure to be followed where the approach cannot be continued;

“MOCA” means the minimum altitude for a defined segment of flight that provides the required obstacle clearance;

“movement area” means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron;

“navigation specification” means a set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace such as RNP specification and RNAV specification;

“neat line” means a border line commonly drawn around the extent of a map or chart and separates the data from the rest of the surround area;

“NOTAM” means a notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations

“obstacle” means all temporary or permanent fixed and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight;

“obstacle clearance altitude or obstacle clearance height” means the lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria.

“obstacle free zone” means the airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes;

“operator” means a person, organization or enterprise engaged in or offering to engage in an aircraft operation;

“orthometric height” means height of a point related to the geoid, generally presented as a MSL elevation;

“performance-based navigation” means area navigation based on performance requirements for aircraft operating along an ATS route on an instrument approach procedure or in a designated airspace

“pilot in command” means the pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight;

“point light” means a luminous signal appearing without perceptible length;

“portrayal” means presentation of information to humans;

“post spacing” means angular or linear distance between two adjacent elevation points;

“procedure turn” means a manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track;

“precision” means the smallest difference that can be reliably distinguished by a measurement process;

“precision approach procedure” means an instrument approach procedure utilizing azimuth and glide path information provided by ILS or PAR;

“pre-flight information bulletin” means a presentation of current NOTAM information of operational significance, prepared prior to flight;

“printed communications” means communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit;

“procedure altitude or height” means a specified altitude or height flown operationally at or above the minimum altitude or height and established to accommodate a stabilized descent at a prescribed descent gradient or angle in the intermediate or final approach segment;

“prohibited area” means an airspace of defined dimensions, above the land areas or territorial waters of a State, in which the flight of aircraft is prohibited;

“quality” means the degree to which a set of inherent characteristics fulfils requirements;

*Note 1: The term “quality” can be used with adjectives such as poor, good or excellent.*

*Note 2: “Inherent”, as opposed to “assigned”, means existing in something, especially as a permanent characteristic.*

“quality assurance” means the part of quality management focused on providing confidence that quality requirements will be fulfilled;

“quality control” means the part of quality management focused on fulfilling quality requirements;

“quality management” means the co-ordinated activities to direct and control an organization with regard to quality;

“RCP type” is a label such as RCP 240 that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity;

“RCP” means a statement of the performance requirements for operational communication in support of specific ATM functions;

“radar vectoring” means provision of navigational guidance to aircraft in the form of specific headings, based on the use of radar;

“radio navigation service” means a service providing information or position data for the efficient and safe operation of aircraft supported by one or more navigation aids;

“radiotelephony” means a form of radio communication primarily intended for the exchange of information in the form of speech;

“relief” means the inequalities in elevation of the surface of the Earth represented on aeronautical charts by contours, hypsometric tints, shading or spot elevations;

“reporting point” means a specified geographical location in relation to which the position of an aircraft can be reported;

“requirement” means the need or expectation that is stated, generally implied or obligatory;

*Note 1: “Generally implied” means that it is custom or common practice for the organization, its customers and other interested parties, that the need or expectation under consideration is implied.*

*Note 2: A qualifier can be used to denote a specific type of requirement, e.g. product requirement, quality management requirement, customer requirement.*

*Note 3: A specified requirement is one which is stated, for example, in a document.*

*Note 4: Requirement can be generated by different interested parties.*

“rescue coordination centre” means a unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region;

“resolution” means a number of units or digits to which a measured or calculated value is expressed and used;

“restricted area” means an airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions;

“reversal procedure” means a procedure designed to enable aircraft to reverse direction during the initial approach segment of an instrument approach procedure and the sequence may include procedure turns or base turns;

“RNAV specification” means a navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV such as RNAV 5 and RNAV 1;

“RNP specification” means a navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP such as RNP 4 and RNP APCH;

“route stage” means a route or portion of a route flown without an intermediate landing;

“runway” means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft;

“runway-holding position” means a designated position intended to protect a runway, an obstacle limitation surface, or an ILS or MLS critical or sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower;

*Note: In radiotelephony phraseologies, the expression “holding point” is used to designate the runway-holding position.*

“runway strip” means a defined area including the runway and stopway, if provided, intended—

(a) to reduce the risk of damage to aircraft running off a runway; and

(b) to protect aircraft flying over it during take-off or landing operations;

“runway visual range” means the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line;

“shoulder” means an area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface;

“SIGMET information” means information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en route weather phenomena which may affect the safety of aircraft operations;

“SNOWTAM” means a special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format;

“special Visual Flight Rules flight” means a flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC;

“station declination” means an alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated;

“stopway” means a defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off;

“taxiing” means movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing;

“taxiway” means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including—

(a) aircraft stand taxilane which is a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only;

(b) apron taxiway which is a portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron;

(c) rapid exit taxiway which is a taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times;

“terminal arrival altitude” means the lowest altitude that will provide a minimum clearance of three hundred metres or one thousand feet above all objects located in an arc of a circle defined by a forty-six kilometers or twenty-five nautical metres radius centred on the IAF, or where there is no IAF on the IF, delimited by straight lines joining the extremity of the arc to the IF. The combined TAAs associated with an approach procedure shall account for an area of three hundred and sixty degrees around the IF;

“terminal control area” means a control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes;

“terrain” means the surface of the Earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow, and excluding obstacles;

“threshold” means the beginning of that portion of the runway usable for landing;

“touchdown and lift-off area” means a load bearing area on which a helicopter may touch down or lift off;

“touchdown zone” means the portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway;

“traceability” means the ability to trace the history, application or location of that which is under consideration;

*Note: When considering product, traceability can relate to –the origin of materials and parts; the processing history; and the distribution and location of the product after delivery.*

“track” means the projection on the earth’s surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from True North, Magnetic North or Grid North;

“traffic avoidance advice” means advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision;

“traffic information” means information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision;

“transfer of control point” means a defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next;

“transferring unit” means air traffic control unit in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit along the route of flight;

“transition altitude” means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;

“transferring unit” means air traffic control unit in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit along the route of flight;

“transition altitude” means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;

“uncertainty phase” means a situation wherein uncertainty exists as to the safety of an aircraft and its occupants;

“validation” means confirmation through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled;

“vectoring” means the provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system;

“verification” means confirmation through the provision of objective evidence, that specified requirements have been fulfilled;

*Note 1: The term “verified” is used to designate the corresponding status.*

*Note 2: “Confirmation can comprise activities such as –  
performing alternative calculations;  
comparing a new design specification with a similar proven design specification;  
undertaking tests and demonstrations; and  
reviewing documents prior to issue.*

“visual flight rules flight” means a flight conducted in accordance with the visual flight rules;

“visual approach procedure” means a series of predetermined manoeuvres by visual reference, from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, where a landing is not completed, a go-around procedure can be carried out;

“visual meteorological conditions” means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima;

“voice-automatic terminal information service” means the provision of ATIS by means of continuous and repetitive voice broadcasts;

“VOLMET broadcast” means the provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts;

“waypoint” means a specified geographic location used to define an area navigation route or the flight path of an aircraft employing area navigation and is identified either as—

(a) fly-by waypoint; or

(b) flyover waypoint;

(2) In these Regulations—

“ACAS” means Airborne Collision Avoidance System;

“ADS” means Automatic Department Surveillance;

“ADS-B” means automatic dependent surveillance – broadcast;

“ADS-C” means automatic dependent surveillance – contract;

“ADIZ” means Air Defence Identified Zone;

“AFS” means Aeronautical Fixed Service;

“AFTN” means Aeronautical Fixed Telecommunication Network;

“AGA” means Aerodrome, Air routes and Ground Aids;

“AIC” means Aeronautical Information Circular;

“AIP” means Aeronautical Information Publication;

“AIRAC” means Aeronautical Information Regulation and Control;

“AIRMET” means .....

“AIS” means Aeronautical Information Services;

“AME” means area minimum altitude;

“ATFM” means Air Traffic Flow Management;

- “ATM” means Air Traffic Management
- “ATIS” means Automatic Terminal Information Service;
- “ATS” means Air Traffic Services;
- “COM” means Communications;
- “CPDLC” means Controller-Pilot Data Link Communications;
- “CRC” means Cyclic Redundancy Check;
- “D-ATIS” means data link-automatic terminal information service;
- “DEM” means Digital Elevation Model;
- “DME/P” means Precision Distance Measuring Equipment;
- “DTM” means Digital Terrain Model;
- “D-VOLMET” means data link-VOLMET;
- “EGM” means Earth Gravitational Model;
- “EGNOS” means European Geostationary Navigation Overlay Service;
- “ELT” means Emergency Location Transmitter;
- “FATO” means Final Approach and Take-Off Area;
- “FIR” means Flight Information Region;
- “FL” means Flight Level;
- “GBAS” means Ground Based Augmentation System;
- “GLONASS” means Global Orbiting Navigation Satellite System;
- “GNSS” means Global Navigation Satellite System;
- “GPS” means Global Positioning System;
- “H24” means Continuous day and night service;
- “ICAO” means International Civil Aviation Organization;

- “IFR” means Instrument Flight Rules;
- “ILS” means Instrument Landing System;
- “IMC” means Instrument Meteorological Conditions;
- “INS” means Inertial Navigation System;
- “ISO” means International Organization for Standardization;
- “MEA” means minimum *en route* altitude
- “MET” means Meteorology;
- “METAR” means aerodrome routine meteorological reports;
- “MLS” means Microwave Landing System;
- “MOCA” means minimum obstacle clearance altitude;
- “MSAS” means Multi-functional transport Satellite-based Augmentation System;
- “MSL” means Mean Sea Level;
- “NM” means Nautical Miles;
- “NOTAM” means Notices to Airmen;
- “NDB” means Non-Directional Radio Beacon;
- “OIS” means Obstacle Identified Surface;
- “PAN-OPS” means Procedures for Air Navigation Services Operations;
- “PAR” means Precision Approach Radar;
- “PIB” means Pre-flight Information Bulletin;
- “PCN” means Pavement Classification Number;
- “PSR” means primary surveillance radar;
- “RCP” means required communication performance;
- “RNAV” means Area Navigation;

- “RNP” means Required Navigation Performance;
- “RVR” means Runway Visual Range;
- “SAR” means Search and Rescue;
- “SARPS” means Standards and Recommended Practices;
- “SBAS” means Satellite-Based Augmentation System;
- “SPECI” means aerodrome special meteorological reports;
- “SIGMET” means information concerning en route weather phenomena which may affect the safety of aircraft operations;
- “SNOWTAM” means Special Series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format;
- “SRE” means Surveillance Radar Element of Precision Approach Radar System;
- “SSR” means Secondary Surveillance Radar;
- “SUPPS” means Regional Supplementary Procedures;
- “TAF” means aerodrome meteorological forecast;
- “TLOF” means Touchdown and Lift Off Area;
- “TMA” means Terminal Control Area;
- “UIR” means Upper flight Information Region;
- “UTC” means Coordinated Universal Time;
- “VFR” means Visual Flight Rules;
- “VHF” means Very High Frequency;
- “Voice-ATIS” means Voice-automatic terminal information service;
- “VOLMET” means Meteorological Information for Aircraft In Flight;
- “VOR” means VHF Omni Range;

“WAC” means World Aeronautical Chart–ICAO;

“WAAS” means Wide Area Augmentation System;

“WDI” means Wind Direction Indicator;

“WGS” means World Geodetic System.